



Patent 7,039,919

PATENT

**IN UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Galen C. Hunt

Examiner: Patel, Haresh N

Patent No.: 7,039,919

Group Art Unit: 2154

Issue Date: May 2, 2006

Confirmation No.: 9594

Customer No.: 22971

Docket No: 116620.01

Title: TOOLS AND TECHNIQUES FOR INSTRUMENTING INTERFACES OF UNITS OF A  
SOFTWARE PROGRAM

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**REQUEST FOR CERTIFICATION OF CORRECTION**

Attn: Certificate of Correction Branch  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

It is requested that a Certificate of Correction be issued correcting printing errors appearing in the above-identified United States patent. Two copies of the text of the Certificate in the suggested form are enclosed.

Issuance of the Certificate of Correction would neither expand nor contract the scope of the claims as properly allowed, and re-examination is not required.

**As the error is that of the Patent Office, it is believed that no fee is due.**

Respectfully submitted,

**Customer Number: 22971**

Date 12/14/2009

By /Henry Gabryjelski/  
Attorney Name: Henry Gabryjelski  
Reg. No.: 62828

**CERTIFICATE UNDER 37 CFR § 1.8:** The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Attn: Certificate of Correction Branch, Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450, on this 8<sup>th</sup> day of March 2010.

*Christine Hartness*  
Christine Hartness

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(Also Form PTO-1050)

## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO : 7,039,919

DATED : May 2, 2006

INVENTOR(S) : Hunt

It is certified that errors appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On page 2, in field (56), under "Other Publications", in column 1, line 6, delete "Efffient" and insert - - Efficient - -, therefor.

On page 2, in field (56), under "Other Publications", in column 1, line 23, delete "Hunt," "Inter" and insert - - Hunt, "Inter - -, therefor.

On page 3, in field (56), under "Other Publications", in column 2, line 36, delete "78-88" and insert - - 79-88 - -, therefor.

In column 3, line 34, delete "In" and insert - - in - -, therefor.

In column 3, lines 42-67 and column 4, lines 1-10, delete  
"To profile an application, an ADPS may measure communication between units of the application. To do so, the ADPS needs to identify units of the application. In an object-oriented framework, an object may not readily present an identity for the ADPS to use during profiling. For example, a COM object presents identifiable interfaces and belongs to an identifiable class, but presents no identity that is readily useable by an ADPS, or by any type of instrumentation system for that matter. Neither ICOPS, CAGES, nor IDAP provides a mechanism for determining which units of an application program expose which interfaces in an environment in which units lack readily available **identities**. An APDS must recognize and treat location constraints on units. In ICOPS, CAGES, and IDAP, a programmer manually indicates location constraints for units of an application. There are numerous techniques for manually recognizing location constraints. A programmer can insert into application source code a call to an ADPS to indicate a location constraint for a unit. Application units can be "marked" in code so that static analysis of the code detects units marked as location constrained. A programmer can provide to an ADPS a list of units that are location constrained. If a programmer is responsible for directly distributing units, the programmer can recognize and handle location constraints when manually implementing the distribution.

MAILING ADDRESS OF SENDER:

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Minneapolis, MN 55402

PATENT NO. 7,039,919

No. of additional copies



Page 5 of 7

Atty Docket No: 116620.01

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PATENT NO : 7,039,919

DATED : May 2, 2006

INVENTOR(S) : Hunt

It is certified that errors appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

While manual recognition of location constraints is acceptable in applications with few units, the task of manual detection dramatically increases in difficulty and complexity as the number of units increases. Moreover, when application units change, location constraints may change too, requiring repetition of the tedious manual process. If a programmer lacks intimate knowledge of the units of an application, the task is further complicated. Nevertheless, neither ICOPS, CAGES, nor IDAP provides a mechanism for automatically detecting per-unit or pair-wise location constraints." and

insert - - To profile an application, an ADPS may measure communication between units of the application. To do so, the ADPS needs to identify units of the application. In an object-oriented framework, an object may not readily present an identity for the ADPS to use during profiling. For example, a COM object presents identifiable interfaces and belongs to an identifiable class, but presents no identity that is readily useable by an ADPS, or by any type of instrumentation system for that matter. Neither ICOPS, CAGES, nor IDAP provides a mechanism for determining which units of an application program expose which interfaces in an environment in which units lack readily available **identities**.

An APDS must recognize and treat location constraints on units. In ICOPS, CAGES, and IDAP, a programmer manually indicates location constraints for units of an application. There are numerous techniques for manually recognizing location constraints. A programmer can insert into application source code a call to an ADPS to indicate a location constraint for a unit. Application units can be "marked" in code so that static analysis of the code detects units marked as location constrained. A programmer can provide to an ADPS a list of units that are location constrained. If a programmer is responsible for directly distributing units, the programmer can recognize and handle location constraints when manually implementing the distribution. While manual recognition of location constraints is acceptable in applications with few units, the task of manual detection dramatically increases in difficulty and complexity as the number of units increases. Moreover, when application units change, location constraints may change too, requiring repetition of the tedious manual process. If a programmer lacks intimate knowledge of the units of an application, the task is further complicated. Nevertheless, neither ICOPS, CAGES, nor IDAP provides a mechanism for automatically detecting per-unit or pair-wise location constraints. - -, therefor.

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Page 6 of 7

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INVENTOR(S) : Hunt

It is certified that errors appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In column 15, line 39, delete "(DCB RPC)" and insert - - (DCE RPC) - -, therefor.

In column 25, line 24, delete "2566" and insert - - 256 - -, therefor.

In column 45, line 65, delete "win32" and insert - - Win32 - -, therefor.

In column 47, line 10-11, delete "commmon" and insert - - common - -, therefor.

In column 47, line 30, after "linking" insert - - . - -.

In column 48, line 7, delete "in to" and insert - - into - -, therefor.

In column 53, line 43, delete "Javascript" and insert - - JavaScript - -, therefor.

In column 58, line 14, in Claim 11, delete "% rapped," and insert - - wrapped, - -, therefor.

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Page 7 of 7

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